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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,578	02/14/2002	Wilhelm Aichele	HOE-678	1576

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LAW OFFICE OF BARRY R LIPSITZ
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EXAMINER

HAMILTON, ISAAC N

ART UNIT PAPER NUMBER

3724

DATE MAILED: 08/14/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

NYK

Office Action Summary

Application No.

10/077,578

Applicant(s)

AICHELE, WILHELM

Examiner

Isaac N Hamilton

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 36-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 36-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show “weights” on page 19, 5th paragraph, as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: “rotating cutting tool 60” on page 12, 2nd paragraph, should be changed to --rotating cutting tool 80--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 49-51 and 66-68 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably

Art Unit: 3724

convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 49 and 66, it is not clear how “the diameter of a supporting ring is adjustable,” and how the “expansion device” radially expands the supporting ring. Further detail explaining how the supporting ring is capable of expanding is required because it would not have been obvious to one with ordinary skill in the art to expand the supporting ring.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 49-51 and 66-68 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is not clear how the “expansion device” radially expands the “supporting ring” that is mounted on the cutting tool.

7. Claims 51 and 68 recite the limitation “the expansion” in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 36, 37, 38, 52, 53, 54, 55, 69 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kesten (4,455,903) in view of Strouse, Jr. (5,857,396).

Art Unit: 3724

Kesten discloses machine frame 18; anvil roller 12; cutting and embossing tool 14, also note the abstract; cutting and embossing edge shown attached to tool 14 in figure 1.

Kesten does not disclose a cutting tool biased essentially parallel to its axis of rotation. However, Strouse, Jr. teaches cutting tool 25 biased essentially parallel to its axis of rotation in column 4, lines 4-21. It would have been obvious to provide a cutting tool biased essentially parallel to its axis of rotation in Kesten as taught by Strouse, Jr. in order to eliminate axial play in all the bearings as recited in column 2, lines 28-46 in Strouse, Jr. It is noted that Strouse, Jr. also teaches that the cutting tool is subject to a tensile load in column 10, line 47.

Regarding claims 38 and 55, note in column 2, lines 15-20 Strouse, Jr. describes that maximum force amplitude, which is referred to as "play" by Strouse, Jr., is controlled to be within acceptable limits. "Acceptable limits" in Kesten is equivalent to "predetermined values" in Strouse, Jr.

10. Claims 39-48 and 56-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kesten and Strouse, Jr. as applied to claims 36-38, 54-55, 69 and 70 above, and further in view of Wilson (5,452,634). The combination discloses everything as noted above and discloses supporting rings 24 in Kesten, but does not disclose an outer sleeve, an inner section and form-locking connections. Wilson teaches outer sleeve 63 and 13, inner section 37 and form-locking connections 65. It would have been obvious to provide an outer sleeve, inner section and form-locking connections in the combination as taught by Wilson in order to secure the material being cut with vacuum pressure. Note the tensional force, tensile stress and tensile load are disclosed in Strouse, Jr. in column 10, line 47. Note the form-locking means has a

Art Unit: 3724

contact surface juxtaposed between the head of screw element/form-locking element 65 and outer sleeve 63, and the contact element is the head of the screw. In figure 2, the form-locking elements are adapted to the diameter and the span of the cutting tool.

11. Claims 49-51 and 66-68 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination as applied to claims 39-48 and 56-65 above, and further in view of Mayer et al (5,074,180), hereafter Mayer. The combination discloses the claimed invention except for radial expansion of the supporting rings by means of an expansion device. However, Mayer teaches radial expansion of the supporting rings by means of an expansion device in columns 4 through 5, lines 61-30. It would have been obvious to provide radial expansion of the supporting rings by means of an expansion device in the combination as taught by Mayer in order to adjust the axial position of the supporting rings. Note form-locking element 17.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Bell et al. is cited for supporting rings and general structure; Roncato is cited for form-locking connections; Nielsen et al. is cited for biasing a cutting tool in a direction parallel to its axis of rotation; Holohan, Jr. is cited for an expanding ring.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isaac Hamilton whose telephone number is 703-305-4949. The examiner can normally be reached on Monday thru Friday between 8am and 5pm. If


Art Unit: 3724

attempts to reach the examiner are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 703-308-1082.

In lieu of mailing, it is encouraged that all formal responses be faxed to 703-872-9302. Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is 703-308-1148.

JH
IH

August 7, 2003


Allan N. Shoap
Supervisory Patent Examiner
Group 3700